

SFP-10G Series

1-port 10 Gigabit Ethernet SFP+ modules



Features and Benefits

- Digital Diagnostic Monitor Function
- Compliant with IEEE 802.3ae
- SFF-8432 SFP+ MSA compliant
- Hot pluggable LC duplex connector
- Class 1 Laser International Safety Standard IEC 60825-1 compliant
- RoHS compliant

Certifications



Introduction

The SFP-10G Series 1-port 10 Gigabit Ethernet SFP+ modules are available as optional accessories for a wide range of Moxa switches.

Specifications

Ethernet Interface

Connectors		Duplex LC connector								
Optical Fiber				10G Ethernet SFP						
				SFP-SR				SFP-LR	SFP-ER	SFP-ZR
		Transceiver Type		Multi-Mode				Single-mode	Single-mode	Single-mode
		Fiber Cable Type		OM1	OM2	OM3	OM4	G.652	G.652	G.652
		Typical Distance		33 m	82 m	300 m	400 m	10 km	40 km	80 km
		Wavelength	Typical (nm)	850				1310	1550	1550
			TX Range (nm)	840 to 860				1260 to 1355	1530 to 1565	1530 to 1565
			RX Range (nm)	840 to 860				1260 to 1355	1530 to 1565	1530 to 1565
		Optical Power	TX Range (dBm)	-5 to -1				-8.2 to +0.5	-1 to +2	0 to +4
RX Range (dBm)	-9.9 to +0.5				-14.4 to +0.5	-15.8 to -1	-23 to -7			
Link Budget (dB)	8.3				7.4	15	23			

		10G Ethernet SFP			
		SFP-SR	SFP-LR	SFP-ER	SFP-ZR
	Dispersion Penalty (dB)	3.9	3.2	3	3
Note: When connecting the SFP-ER or SFP-ZR, we recommend using an attenuator to prevent damage caused by excessive optical power. Typical Distance: To reach the typical distance of specified fiber transceiver, please refer to formula: Link budget(dB) > dispersion penalty(dB) + total link loss(dB)					

Power Parameters

Power Consumption	SFP-10GERLC-T: Max. 2.2 W SFP-10GZRLC-T: Max. 2.5 W SFP-10GLRLC-T: Max. 1 W
-------------------	---

Environmental Limits

Operating Temperature	-40 to 85°C (-40 to 185°F) Note: When using the SFP-10GZRLC-T with the ICS-G7526A/G7528A/G7826A/G7828A and the MDS-G4000-4XGS/MDS-G4000-L3-4XGS Series, the maximum temperature is -10 to 60°C (14 to 140°F).
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

Safety	UL 62368-1 IEC 62368-1 IEC 60825-1
EMC	EN 55032/35
EMI	FCC 15B Test Report ICES-003: 2020 Issue 7
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV(AC), 0.5 kV(DC); Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 1 kV/2 kV(AC), 0.5 kV(DC); Signal: 1 kV IEC 61000-4-6 CS: 0.15 MHz to 10 MHz: 3 V, 10 MHz to 30 MHz: 3 to 1 V, 30 MHz to 80 MHz: 1V. IEC 61000-4-8 PFMF: 1 A/m at 50 Hz IEC 61000-4-11: Voltage Dips & Interruption

Warranty

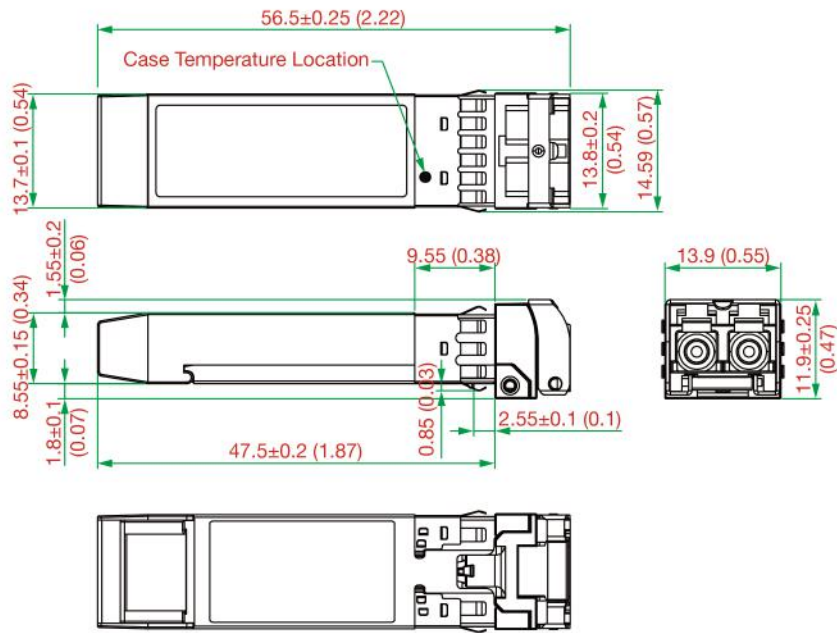
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x SFP-10G Series module
Documentation	1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	Ports	Connector	Transmission Distance	Operating Temp.
SFP-10GSRLC-T	1 x 10GBase-SR, multi-mode	LC	33 m/82 m/300 m/400 m	-40 to 85°C
SFP-10GLRLC-T	1 x 10GBase-LR, single-mode	LC	10 km	-40 to 85°C
SFP-10GERLC-T	1 x 10GBase-ER, single-mode	LC	40 km	-40 to 85°C
SFP-10GZRLC-T	1 x 10GBase-ZR, single-mode	LC	80 km	-40 to 85°C

© Moxa Inc. All rights reserved. Updated May 08, 2024.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.